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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,067	12/31/2001	Hiroshi Hata	217671US3	5638

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EXAMINER

WRIGHT, DIRK

ART UNIT PAPER NUMBER

3681

DATE MAILED: 12/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/032,067

Applicant(s)

HATA ET AL.

Examiner

Dirk Wright

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32 and 33 is/are allowed.
- 6) ☒ Claim(s) 1-10, 18, 21-24 and 34-41 is/are rejected.
- 7) ☒ Claim(s) 11-17, 19, 20 and 25-31 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

Claims Rejected

Claims 1-10, 18, 21-24 and 34-41 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese patent '773, cited by applicant. While applicant identifies his rotary electric machines 6 and 9 as motor/generators, his claims do not. For purposes of claim interpretation, the claimed electric motor is identified as item 9, the power generator as item 6, the power synthesizing mechanism as item 7 and the speed changing mechanism as item 8. The reference shows numerous embodiments of a hybrid electric vehicle drive, with an electric motor MR, MF, an electric generator GR, GF, and two planetary gear sets, all of which are coaxially disposed. An internal combustion engine (ICE) is not shown, but assumed and connected to the input shaft I. The planetary gearing R2, C2 and S2 associated with the motor correspond to applicant's "speed change mechanism", and the planetary gearing R1, C1 and S1 associated with the generator correspond to applicant's "power synthesizing mechanism". Figure 10 shows a particularly relevant embodiment wherein motor rotor MR is connected to sun gear S2, associated carrier C2 is fixed to a housing, and ring gear R1 is connected to ring gear R2 and to an output shaft, and wherein generator rotor GR is connected to sun gear S1, carrier C1 is connected to an output shaft of the ICE, and ring gear R1 is connected to the output and to the other ring gear R2. Figure 8 shows another relevant embodiment where R2 is fixed to a housing and the carrier C2 is connected to ring gear R1, which is also connected to an output shaft.

Claims Allowed

Claims 32 and 33 are allowed.

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Allowable Subject Matter

Claims 11-17, 19, 20, and 25-33 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The subject matter is allowable because the prior art does not anticipate nor render obvious the invention of a hybrid electric drive for a vehicle which includes two gear sets, an electric motor, an electric generator, one of the gear sets associated with the generator and an output from an ICE being of the planetary type, the other of the gear sets associated with the motor for reducing the output speed thereof and having an output connected to the one gear set, wherein the other gear set is either a pair of meshing external gears or is a meshing pair of internal and external gears such that in either case the axis of the motor is offset from the axis of the generator and planetary gear set.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dirk Wright whose telephone number is 703-308-2160. The examiner can normally be reached on Monday through Friday, 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

Dirk Wright

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Primary Examiner

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DW

Saturday, December 06, 2003

A handwritten signature in black ink, appearing to be 'Z. H. Smith', written in a cursive style.